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Proposed Maximum Residue Limit

PMRL2015-38

Quizalofop-ethyl

(publié aussi en français)

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Under the authority of the *Pest Control Products Act*, Health Canada's Pest Management Regulatory Agency (PMRA) has concluded that the addition of new uses on ENLIST™ field and seed corn, cantaloupes, and crops included in the Cucurbit Vegetable Crop Group (Crop Group 9) to the product label of Assure II Herbicide, containing technical grade quizalofop-p-ethyl, are acceptable. The specific uses approved in Canada are detailed on the label of Assure II Herbicide, *Pest Control Products Act* Registration Number 25462.

The evaluation of these quizalofop-p-ethyl applications indicated that the end-use product has value and the human health and environmental risks associated with the new uses are acceptable. Details regarding the registration of cantaloupes can be found in the corresponding Evaluation Report available in the Pesticides and Pest Management section of Health Canada's website, under Public Registry, Pesticide Product Information Database.¹

Before registering a pesticide for food use in Canada, the PMRA must determine the quantity of residues that are likely to remain in or on the food when the pesticide is used according to label directions and that such residues will not be a concern to human health. This quantity is then legally established as a maximum residue limit (MRL). An MRL applies to the identified raw agricultural food commodity as well as to any processed food product that contains it, except where separate MRLs are specified for the raw agricultural commodity and a processed product made from it.

Residues of the resolved isomer quizalofop-p-ethyl are covered by MRLs established for quizalofop-ethyl, the unresolved isomeric mixture. Consultation on the proposed MRLs for quizalofop-ethyl is being conducted via this document (see Next Steps, the last section of this document). A summary of the field trial data used to support the proposed MRLs can be found in Appendix I.

To comply with Canada's international trade obligations, consultation on the proposed MRLs is also being conducted internationally by notifying the World Trade Organization, as coordinated by Canada's Notification Authority and Enquiry Point.

The proposed MRLs, to be added to the MRLs already established for quizalofop-ethyl are as follows.

Table 1 Proposed Maximum Residue Limits for Quizalofop-ethyl

Common Name	Residue Definition	MRL (ppm) ¹	Food Commodity
Quizalofop-ethyl	ethyl 2-[4-[(6-chloro-2-quinoxalinyloxy)phenoxy]propanoate, including the acid metabolites of (RS)2-[4-(6-chloroquinoxalin-2-yloxy)phenoxy]propanoic acid, all expressed as quizalofop-ethyl	0.02	Field corn
		0.06	Cucurbit Vegetables (Crop Group 9)

ppm = parts per million

¹ The relevant report can be accessed by selecting Applications/Minor Use/Historical and requesting the Evaluation Report found under Application Number 2011-0957.

MRLs are proposed for each commodity included in the listed crop grouping in accordance with the Residue Chemistry Crop Groups webpage in the Pesticides and Pest Management section of Health Canada's website.

MRLs established in Canada may be found using the Maximum Residue Limit Database on the Maximum Residue Limits for Pesticides webpage. The database allows users to search for established MRLs, regulated under the *Pest Control Products Act*, both for pesticides or for food commodities.

International Situation and Trade Implications

There are no corresponding American tolerances listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide for the MRLs proposed for quizalofop-ethyl in Canada. Currently, there are no Codex MRLs² listed for quizalofop-ethyl in or on any commodity on the Codex Alimentarius Pesticide Residues in Food webpage.

Next Steps

The PMRA invites the public to submit written comments on the proposed MRLs for quizalofop-ethyl up to 75 days from the date of publication of this document. Please forward your comments to Publications (see the contact information on the cover page of this document). The PMRA will consider all comments received before making a final decision on the proposed MRLs. Comments received will be addressed in a separate document linked to this PMRL. The established MRLs will be legally in effect as of the date that they are entered into the Maximum Residue Limit Database.

² The Codex Alimentarius Commission is an international organization under the auspices of the United Nations that develops international food standards, including MRLs.

Appendix I

Summary of Field Trial Data Used to Support the Proposed Maximum Residue Limits

Residue data for quizalofop-p-ethyl in hybrid field corn containing the Aryloxyalkanoate Dioxygenase-1 (AAD-1) gene were submitted to support the domestic use of Assure II Herbicide on ENLIST™ field and seed corn. In addition, a processing study in treated AAD-1 field corn was reviewed to determine the potential for concentration of residues of quizalofop-p-ethyl into processed commodities. Residue data for quizalofop-p-ethyl in cantaloupe, zucchini, and cucumber were submitted to support the domestic use of Assure II Herbicide on crops included in the Cucurbit Vegetable Crop Group.

Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for quizalofop-ethyl was based upon the submitted field trial data, and the guidance provided in the OECD MRL Calculator and PRO2005-04 (Guidance for Setting Pesticide Maximum Residue Limits Based on Field Trial Data). Table A1 summarizes the residue data used to calculate the proposed MRLs.

Table A1 Summary of Field Trial and Processing Data Used to Support MRLs

Commodity	Application Method/ Total Application Rate (g a.i./ha) ¹	Preharvest Interval (days)	Maximum Residues ² (ppm)	Minimum Residues ² (ppm)	Experimental Processing Factor
Transgenic (AAD-1) field corn	Postemergent foliar application/ 86.2-98.6	79-144	<0.02	<0.02	Could not be determined as residues were non-quantifiable in/on corn grain and the processed commodities of refined oil, meal, grits and flour.
Cantaloupes	Broadcast foliar spray/ 71-74	26-29	0.052	<0.05	Not applicable
Zucchini	Broadcast foliar spray/ 65.2-71.6	29-36	<0.05	<0.05	Not applicable
Cucumbers	Broadcast foliar spray/ 65-76	30	<0.05	<0.05	Not applicable

¹ g a.i./ha = grams of active ingredient per hectare

² Combined residues of quizalofop-p-ethyl and the metabolite quizalofop acid, expressed as quizalofop-p-ethyl equivalents.

Based on the dietary burden and residue data, no changes are needed to the MRLs established in the Health Canada MRL database for residues of quizalofop-ethyl including the acid metabolite in/on livestock commodities (<http://pr-rp.hc-sc.gc.ca/mrl-lrm/index-eng.php>).

Following the review of all available data, the MRLs proposed in Table 1 are recommended to cover residues of quizalofop-ethyl. Residues of quizalofop-ethyl in these commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.